






**A RETROGRADE HIGH FREQUENCY TISSUE SPLITTER****Publication number:** JP9500047 (T)**Publication date:** 1997-01-07**Inventor(s):****Applicant(s):****Classification:**

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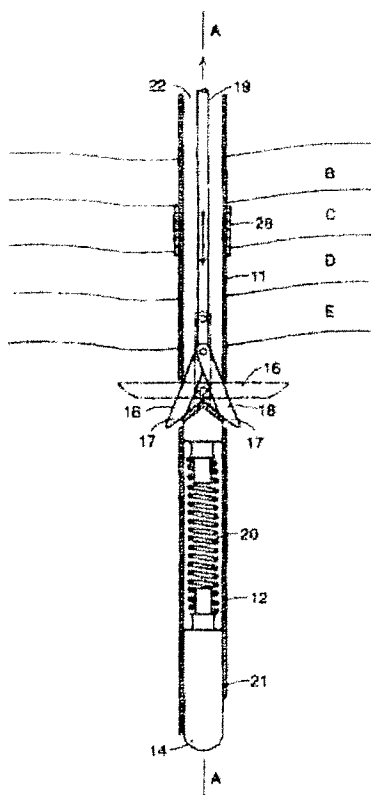
-  WO9514436 (A1)
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-  US5449355 (A)
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Abstract not available for JP 9500047 (T)

Abstract of corresponding document: **WO 9514436 (A1)**

A device (10) for retrograde hole opening through tissue has a member (11) elongate on an axis with a cross section shaped to insert axially through external tissue. A distal and a proximal end (13) of the member (11) respectively enter the tissue during placement and remain outside the tissue for control (26). A tip (14) at the distal end (12) has a deployable tissue divider (16) with one or more tissue parting elements (17) and each has a splitter (18). The tissue parting elements (17) are located within the cross-sectional dimensions of the member (11) in a storage position and are movable relative to the tip (14) for placement in an exposed position relative to the tip (14) when shifted from storage so that the splitter (18) thereof splits tissue during retrograde extraction along the axis and contact with tissue. Linkage (19) between the proximal end (13) and the deployable tissue divider (16) retains each of the tissue parting elements (17) with its splitter (18) exposed. The deployable tissue divider (16) has an electrode (23) for transmitting radio frequency energy received from the proximal end (13) to at least each splitter (18). A return path (27) completes the circuit to provide an electrosurgical effect during the retrograde extraction. A method of placing the device (10) for retrograde hole opening aligns the axis of the elongate member (11) normal to the outside abdominal wall of the body, places the distal end (12) through the tissue and leaving the proximal end (13) outside of the tissue, deploys the tissue divider (16) having one or more tissue parting elements (17) that are first located in a storage position within the cross section to an exposed position with the splitter (18) of each element positioned to split tissue, moves each element axially while exposed and fixed and splits tissue during extraction from the body cavity.



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